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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/626,000	07/24/2003	Ben T. Mozo	P68804US01JB	9925	
	690 01/04/2007 ANT ROSE & WHITE, L	EXAMINER			
INTELLECTUA	L PROPERTY DEPART	PENDLETON, BRIAN T			
1819 FIFTH AVI BIRMINGHAM,		ART UNIT	PAPER NUMBER		
			2615		
	···		<u>.                                    </u>		
SHORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS 01/04/2007			DADED		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Арр	Application No. Applicant(s)					
Office Action Summary			626,000	MOZO, BEN T.	•			
			miner	Art Unit				
		l l	n T. Pendleton	2615				
Period fo	The MAILING DATE of this communic or Reply	ation appears	on the cover sheet v	with the correspondence ac	ddress			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MA asions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this community of the period for reply is specified above, the maximum stature to reply within the set or extended period for reply with the period for reply with the set or extended period for reply with the period for reply w	ILING DATE ( 37 CFR 1.136(a). I lication. tory period will apply II, by statute, cause	OF THIS COMMUN  In no event, however, may a  y and will expire SIX (6) MC  the application to become A	ICATION. The reply be timely filed  ONTHS from the mailing date of this of the capanity of the				
Status								
1) 又	Responsive to communication(s) filed	on <i>24 July 20</i>	03.					
	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.							
′—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
•	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
4)⊠	Claim(s) 1-18 is/are pending in the app	olication.						
4a) Of the above claim(s) is/are withdrawn from consideration.								
	Claim(s) 11-18 is/are allowed.							
	6)⊠ Claim(s) <u>1-10</u> is/are rejected.							
7)	Claim(s) is/are objected to.							
8)□	Claim(s) are subject to restriction	on and/or elec	tion requirement.					
Applicati	on Papers							
9)	The specification is objected to by the I	Examiner.		•				
	The drawing(s) filed on <u>24 July 2003</u> is		cepted or b) obje	cted to by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
	Replacement drawing sheet(s) including the	e correction is	required if the drawing	g(s) is objected to. See 37 C	FR 1.121(d).			
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority u	ınder 35 U.S.C. § 119							
	Acknowledgment is made of a claim for ☐ All b)☐ Some * c)☐ None of:	r foreign priori	ty under 35 U.S.C.	§ 119(a)-(d) or (f).				
,	1. Certified copies of the priority do	cuments have	e been received.					
	2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
Attach								
Attachment	(s) e of References Cited (PTO-892)		A) [ ] ()	Cumman (PTO 440)				
	e of References Cited (P10-892) e of Draftsperson's Patent Drawing Review (PTC	)-948)	4) 🔲 Interview Paper No	Summary (PTO-413) (s)/Mail Date				
3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application  6) Other:								

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by Rhines, US Patent 4,479,239. Rhines discloses a sound detecting device comprising headset 26 having earcups 28 and 29 for attenuating ambient sound waves, microphone 20 for transducing ambient sound waves into electronic signals, potentiometer 27 for increasing the electrical signals at a fixed rate of gain, IC-2 and Q-2 for deactivating and reactivating the sound output in the event of saturation of the amplifier IC-1 (see column 4 lines 11-27), speaker 32 for transducing the electronic signals into sound waves, and amplifier IC-1 for supplying the sound waves suitable for the auditory system to the external auditory canal. Claim 6 is rejected.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhines.

Rhines does not disclose that the sound is deactivated in 10 microseconds or less, is reactivated in 30 microseconds or less, is deactivated when the ambient sound waves exceed 139 dB peak, or

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is reactivated when the sound waves no longer exceed 139 dB peak. One of ordinary skill in the art would have realized those values for a sound detecting device utilized to suppress loud sounds without undue experimentation. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the circuitry to meet the values claimed for the purpose of quickly suppressing loud sounds over 139 dB and quickly restoring the ambient sounds under 139 dB.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhines in view of Morrill et al, US Patent 6,175,633. Rhines discloses a method of communication comprising headset 26 having earcups 28 and 29 for attenuating ambient sound waves, microphone 20 for transducing ambient sound waves into electronic signals, potentiometer 27 for increasing the electrical signals at a fixed rate of gain, IC-2 and Q-2 for deactivating and reactivating the sound output in the event of saturation of the amplifier IC-1 (see column 4 lines 11-27), speaker 32 for transducing the electronic signals into sound waves, and amplifier IC-1 for supplying the sound waves suitable for the auditory system to the external auditory canal. Rhines does not disclose providing output to and input from a radio communications system. Morrill et al teach a radio communications apparatus with attenuating ear pieces comprising ear pieces 22L and 22R, transducers 24L and 24R, and radio transceiver 16. Thus, Morrill et al. teach providing output to and input from a radio communications system for an apparatus for attenuating ambient sound waves. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Rhines by coupling a communication system, as taught by Morrill et al, for the purpose of providing external communication, such as to other persons observing distant sounds. Claim 1 is rejected. Regarding claims 2-5, one of ordinary skill in the

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art would have realized those values for a sound detecting device utilized to suppress loud sounds without undue experimentation. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the circuitry to meet the values claimed for the purpose of quickly suppressing loud sounds over 139 dB and quickly restoring the ambient sounds under 139 dB.

## Allowable Subject Matter

Claims 11-18 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not disclose nor suggest a fixed gain pre-amplifier, rheostat, and
fixed gain output amplifier in the electronic circuitry, as recited in independent claims 11, 13, 15,
and 17. As a result, the claims and their dependents are allowed.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Brimhall, US Patent 6,801,629; Svean et al, US Patent 7,039,195; Chang et al, US Patent 5,631,965; Bourk, US Patent 5,182,774; Trompler, US Patent 4,928,311; Williams, US Patent 4,064,362; and Kyle et al, US Patent 3,952,158.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Pendleton whose telephone number is (571) 272-7527. The examiner can normally be reached on M-F 7-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian T. Pendleton Primary Examiner Art Unit 2615

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btp